WHAT IS CLAIMED IS:

1. A shift control apparatus for a hybrid transmission, comprising:

a plurality of revolutional members which are enabled to be arranged on a predetermined lever diagram;

a differential unit having two degrees of freedom such that if revolution states of two revolutional members thereof are determined, the revolutional states of the other revolutional members are determined, an input of a main power source (ENG), an output to a drive system, and a plurality of motor/generators (MG1, MG2) are coupled to the respective revolutional members of the differential unit to adjust a power from the motor/generators in such a manner that a shift ratio between the main power source and the drive system is varied continuously;

a target drive torque calculating section that calculates a target drive torque ($T*_{oO}$) to the drive system in accordance with a driving condition;

a target input revolution speed calculating section that calculates a target input revolution speed ($\omega*_E$) of one of the revolutional members which is coupled to the main power source (ENG);

a target input revolution acceleration calculating section that calculates a target input revolution acceleration (u_{io}) to converge an actual input revolution (ωi) into the target input revolution speed ($\omega*i$); and

a target value correcting section that corrects at least one of the target drive torque

($T*_{oo}$) and the target input revolution (u_{io}) to be a value within a realizable region to be set as a drive torque command value (T*o) and an input revolution acceleration command value (u_{io}) in such a manner that polarities of the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}) are left unchanged, in a case where a combination of the target drive torque with the target input revolution acceleration falls out of a realizable region on two-dimensional coordinates of the drive torque and the input revolution acceleration related to a combination of the drive torque and the input revolution acceleration which is feasible in a state of the present motor/generators, a battery for the motor/generators (MG1, MG2), and the main power source, the drive torque command value (T*o) and the input revolution acceleration command value (u_i) contributing to controls of the main power source and the motor/generators (3) in place of the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}).

2. A shift control apparatus for a hybrid transmission as claimed in claim 1, wherein the target value correcting section corrects only the target input revolution acceleration without the correction of the target drive torque when correcting at least one of the target drive torque (T*o) and the target input revolution acceleration (u_i).

3. A shift control apparatus for a hybrid transmission as claimed in claim 1, wherein the target value correcting section corrects the target

input revolution acceleration (u_{io}) not to become lower than a predetermined input revolution acceleration lower limit set value (y_{min}) and to be set as the input revolution acceleration command value when correcting at least one of the target drive torque and the target input revolution acceleration and corrects the target drive torque ($T*_{oo}$) in such a manner that its correction quantity is to be a minimum to set the drive torque command value (T*o).

4. A shift control apparatus for a hybrid transmission as claimed in claim 1, wherein the target value correcting section corrects only the target drive torque without correction of the target input revolution acceleration when correcting at least one of the target drive torque and the target input revolution acceleration to provide the drive torque command value (T*o) and the input revolution acceleration command value (u_i).

5. A shift control apparatus for a hybrid transmission as claimed in claim 1, wherein the target value correcting section corrects the target drive torque not to be lower than a predetermined drive torque lower limit set value (x_{min}) and sets the corrected target drive torque as the target torque command value and corrects the target input revolution acceleration in such a manner that its correction quantity is to be minimum and sets the corrected input target revolution acceleration to the input revolution acceleration command value (u_i).

6. A shift control apparatus for a hybrid transmission as claimed in claim 1, wherein the target value correcting section derives two boundary lines prescribing the realizable region on the two-dimensional coordinates of drive torques (To) and the engine (input) revolution acceleration {(d/dt)dωi} on the basis of a battery rated power (P_{BMAX}), a drive torque (To), the engine (input) revolution acceleration (d/dt)ωi, a running resistance torque (T_R), an engine torque (T_E), and specifications of the hybrid transmission; derives a target operating point which is a combination of the target drive torque x_0 (T^*_{oo}) and the target input revolution acceleration y_0 (= u_{io}), a straight line passing through an origin of the two-dimensional coordinates and the target operating point, and points of intersections (x_1, y_1) and (x_2, y_2) at which the straight line is intersected with the two boundary lines, wherein $x_1 < x_2$, and determines whether x_0 (= T^*_{oo}) falls between x coordinate (x_1) of one boundary line and x coordinate (x_2) of the other of the two boundary lines.

7. A shift control apparatus for a hybrid transmission as claimed in claim 6, wherein, when determining that x_0 (=T^*_{oo}) falls between x_1 and x_2, the target value correcting section determines that the target drive torque x_0 (=T^*_{oo}) and the target input revolution acceleration y_0 (= u_{io}) falls within the realizable region (A) and sets the target drive torque x_0 (= T^*_{oo}) and the target engine (input) revolution acceleration y_0 (= u_{io}) directly as a post-

correction drive torque command value (T*o) and as a post-correction engine revolution acceleration command value (u_1).

8. A shift control apparatus for a hybrid transmission as claimed in claim 7, wherein, when determining that x_0 (= $T*_{00}$) does not fall within an interspace of the two-dimensional coordinates x_1 and x_2, the target value correcting section determines that the target drive torque x_0(= $T*_{00}$) and the target input revolution acceleration y_0 (= u_{10}) are out of the realizable region (A), sets one of the points of intersections (x_1, y_1) and (x_2, y_2) which is nearer to the target operating point (x_0, y_0) as a command operating point, and sets the target drive torque ($T*_{00}$) as the post-correction drive torque command value ($T*_0$) and the post-correction input revolution acceleration command value (u_1).

9. A shift control apparatus for a hybrid transmission as claimed in claim 8, wherein the shift control apparatus further comprises a motor/generator torque distributing section that determines target torques ($T*_{10}$ and $T*_{20}$) of the motor/generators (MG1 and MG2) to achieve the post-correction drive torque command value (T*o) and post-correction input revolution acceleration command values (u_1).

10. A shift control apparatus for a hybrid transmission as claimed in claim 9, wherein the shift control apparatus further comprises a motor/generator torque command value determining section that

determines motor/generator torque command values ($T*_1$ and $T*_2$) to those values within an output enabled torque range by correcting the target motor/generator torques ($T_{10}*$ and $T_{20}*$) to values thereof within an output enabled torque range in a case where the target motor/generator torques ($T*_{10}$ and $T*_{20}$) are in excess of the mechanically output enabled torque range or in a case where the target motor/generator torques ($T*_{10}$ and $T*_{20}$) are in excess of a battery rated power when they are realized.

11. A shift control apparatus for a hybrid transmission as claimed in claim 10, wherein the motor/generator torque command value determining section determines whether the target motor/generator torques ($T*_{10}$ and $T*_{20}$) are within the mechanically output enabled torque range and within an operable region that is not in excess of a battery rated power when these target motor/generator torques ($T*_{10}$ and $T*_{20}$) are realized.

12. A shift control apparatus for a hybrid transmission as claimed in claim 11, wherein, on two-dimensional coordinates of the motor/generators (MG1, MG2) torques (T_1 and T_2), the operable region (FX) is an overlapped region of a region of FA prescribing the drive torque and engine revolution speed which falls within a battery rated power from a range of a battery charge-and-discharge quantity (P_B), a region of FB prescribing a mechanically operable region of the motor/generators, and of a region of FC prescribing a torque range of motor/generators (MG1

and MG2) when the target motor/generator torques (T^*_{10} and T^*_{20}) are corrected, to prevent the engine revolution acceleration from approaching to zero than a predetermined input revolution limit set value y_{min}, the engine revolution acceleration is a value toward the engine revolution acceleration side when the target motor/generator torques (T_{*10} and T^*_{20}) are achieved before correction.

13. A shift control apparatus for a hybrid transmission as claimed in claim 12, wherein the motor/generator torque command value determining section determines whether the target motor/generator torques (T^*_{10} and T^*_{20}) falls within the operable region (FX) depending upon whether predetermined three conditions are satisfied.

14. A shift control apparatus for a hybrid transmission as claimed in claim 13, wherein the motor/generator torque command value determining section sets directly the target motor/generator torques (T^*_{10}, T^*_{20}) as motor/generator torque command values (T^*_1, T^*_2) without correction when the target motor/generator torques (T^*_{10}, T^*_{20}) are determined to fall within the operable region (FX).

15. A shift control apparatus for a hybrid transmission as claimed in claim 14, wherein the motor/generator torque command value determining section corrects the target motor/generator torques T^*_{10}, T^*_{20} to fall within the operable region (FX) in such a manner that a variation in the drive torque

provides a minimum, the corrected target motor/generator torques being directly set as post-correction motor/generator torque command values $T*_1$, $T*_2$.

16. A shift control apparatus for a hybrid transmission as claimed in claim 15, wherein, when an ante-correction operating point corresponding to the target motor/generator torques ($T*_{10}$, $T*_{20}$) is out of the operable region of FX and an equi-driving torque straight line passing through the ante-correction operating point is not intersected with the operable region (FX), the corrections for target motor/generator torques T_1, T_2 are made in such a manner that an operating point (•) which is within the operable region (FX) and nearest to the equi-driving torque straight line passing through the ante-correction operating point is set to be a post-correction operating point, the motor/generator torques (T_1, T_2) at the post-correction operating point being set to be post-correction motor/generator torque command values $T*_1$ and $T*_2$.

17. A shift control apparatus for a hybrid transmission as claimed in claim 13, wherein the predetermined three conditions are that a battery charge-and-discharge quantity P_B obtained by substituting $T*_{10}$ and $T*_{20}$ into equation of $P_B = \omega_1 T_1 + \omega_2 T_2$; the target motor/generator torque $T*_{10}$ is smaller than a torque maximum value T_{1max} of the motor generator MG1 obtained substituting $T*_{20}$ into equation of $T_{1max} = f_2(T_{2max}, \omega_1, \omega_2)$; and, if $b_{11}T_R$ +

$b_{12}T_E + b_{13}T*_{10} + b_{14}T*_{20} \geq 0$, the target motor generator torques $T*_{10}$ and $T*_{20}$ satisfy a relationship of an equation of $b_{11}T_R + b_{12}T_E + b_{13}T_1 + b_{14}T_2 \geq y_{min}$ and, if $b_{11}T_R + b_{12}T_E + b_{13}T*_{10} + b_{14}T*_{20} \leq 0$, the target motor/generators $T*_{10}$, $T*_{20}$ satisfies the following equation $b_{11}T_R + b_{12}T_E + b_{13}T_1 + b_{14}T_2 \leq y_{min}$, wherein T_R denotes a running resistance, T_1 and T_2 denote torques of the respective motor/generators, T_E denotes an engine torque, b_{11}, b_{12}, b_{12}, and b_{14} have the following relationship of $d\omega i/dt$ $(i = 1, 2) = b_{11}T_R + b_{12}T_E + b_{13}T_1 + b_{14}T_2$.

18. A shift control apparatus for a hybrid transmission as claimed in claim 2, wherein the target value correcting section, on two-dimensional coordinates of the drive torque (To) and the input revolution acceleration $\{(d/dt)\omega i\}$, determines a command operating point (•) on the basis of a target operating point (o) which corresponds to a combination of the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}) and, when a gear shift occurs such that both target driving torque ($T*_{oo}$) and target input revolution acceleration (u_{io}) are abruptly varied, the target driving torque T_{*oo} is not corrected but is directly set to a drive torque command value (T*o) and only the target input revolution acceleration command value (u_{io}) is corrected in such a manner that the target operating point (o) corresponding to the combination between the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}) is

moved with a minimal displacement within the realizable region (A) to a command operating point (•) which corresponds to the combination of the drive torque command value ($T*_o$) and the input engine revolution acceleration command value (u_i).

19. A shift control apparatus for a hybrid transmission as claimed in claim 18, wherein a point (•) on the two-dimensional coordinates which passes through a target operating point (o) which corresponds to the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}) and on a line segment which is parallel to longitudinal axis representing the engine revolution acceleration, which is within the realizable region, and which is nearest to the target operating point, the drive torque (T*o) and engine revolution acceleration (u_i) being set to be the drive torque command value (T*) and engine revolution acceleration command value (u_i).

20. A shift control apparatus for a hybrid transmission as claimed in claim 19, wherein, when the post-correction input revolution acceleration command value (u_i) is smaller than the preset input revolution acceleration limit set value (y_{min}), a point of intersection between one of two boundary lines prescribing the realizable region A which is nearer to the target operating point (o) and a line representing the input revolution acceleration lower limit set value y_{min} is (•), the drive torque (T*o) and the engine revolution acceleration (u_i) at the command operating point are set to be the drive

torque command value and input revolution acceleration command value.

21. A shift control apparatus for the hybrid transmission as claimed in claim 4, wherein the target value correcting section determines points of intersections (x_1、 y_0) and (x_2, y_0) between a straight line passing through a target operating point (x_0, y_0) which corresponds to a combination between the target drive torque x_0 (= $T*_{oo}$) and the engine revolution acceleration y_0 (= u_i) and which is parallel to a drive axis of a lateral axis of the two-dimensional coordinates with the input revolution acceleration as a longitudinal axis and two boundary lines prescribing the realizable region (A) and determines whether x_0 (= $T*_{oo}$) falls between a point of x_1 and the other point of x_2 wherein $x_1 < x_2$.

22. A shift control apparatus for the hybrid transmission as claimed in claim 21, wherein the target value correcting section determines a point of intersections (x_c, y_0) between one of the two boundary lines prescribing the realizable region which is nearer to the target operating point and a line expressing $(d/dt)\omega i = y_0$, the point of intersection (x_c, y_0) being moved with the target input revolution acceleration (u_{io}) left unchanged and the target drive torque ($T*_{oo}$) moved to a point (x_c) within the realizable region which is nearest to (x_0)., calculates the drive torque lower limit set value (x_{min}) on the basis of a deviation between a target engine revolution speed and actual engine

revolution speed, and determines whether, with x_{min} as a reference, x_c is located toward x_0 side.

23. A shift control apparatus for the hybrid transmission as claimed in claim 22, wherein the target value correcting section sets the point of intersection (x_c, y_0) as a command operating point when determining that the point (x_c) is located toward x_0 side with (x_{min}) as the reference, the drive torque (T_{*O}) and engine revolution acceleration (u_i) at the command operating point being set as a post-correction drive torque command value (T*o) and a post-correction engine revolution acceleration command value (u_i) and when determining that the point (x_c) is not located toward x_0 side with (x_{min}) as the reference, a point of intersection between one of the two boundary lines prescribing the realizable region which is nearer to the target operating point (x_0, y_0) and a line expressing the drive torque $T_0 = x_{min}$ being set to be the command operating point.

24. A shift control apparatus for the hybrid transmission as claimed in claim 1, wherein the target value correcting section derives the realizable region (A) on the two-dimensional coordinates with one axis calibrated with a drive torque (To) and the other axis calibrated with the engine revolution acceleration (d/dt)ωi which falls within a battery rated power, on the basis of the engine revolution acceleration (d/dt)ωi, an output revolution speed (ω_0) of the hybrid transmission, a running resistance torque (T_R), an engine torque (T_E), and a battery charge-and-discharge quantity (P_B), and

derives another realizable region (BC) of a drive torque a mechanically generable by the motor/generators (MG1, MG2) in addition to the realizable region (A), an overlapped area of both of the realizable region (BC) constituting a still another realizable region (D).

25. A shift control apparatus for the hybrid transmission as claimed in claim 5, wherein the target value correcting section derives the realizable region (A) expressed on two-dimensional coordinates of the drive torque (To) calculated in a lateral axis thereof and of the input revolution calibrated in a longitudinal axis thereof, calculates two boundary lines prescribing the realizable region (A) on the basis of a battery rated power (P_{BMAX}), a running resistance torque (T_R), an engine torque (T_R), and specifications of the hybrid transmission, derives points of intersections between a straight line passing through the target operating point (x_0, y_0) which corresponds to a combination between the target drive torque x_0 (= $T*_{oO}$) and target input revolution acceleration y_0 (=u_{io}) and which is parallel to an input revolution acceleration axis which is a longitudinal axis of the two-dimensional coordinates, with the drive axle as a lateral axis and the two boundary lines prescribing the realizable region and determines whether a point of y_0 of the target operating point (x_0, y_0) falls in a space of the two-dimensional coordinates between longitudinal axis coordinates of the points of intersections (y_1 and y_2).

26. A shift control apparatus for the hybrid transmission as claimed in claim 25, wherein, when determining that the point of x_0 falls out of the space between y_1 and y_2, the target value correcting section determines that the target operating point is out of the realizable region (A) and derives a point of intersection (x_0, y_0) between one of the realizable region boundary lines which is nearer to the target operating point (x_0, y_0) and a line expressing that To $=x_0$, the point of intersection (x_0, y_0) being a point of y_c which is nearest to the point y_0 and is within the realizable region and to which the target input revolution acceleration u_{io} is moved, calculates the input revolution acceleration lower limit set value (y_{min}) on the basis of a deviation between the target input revolution speed and an actual input revolution speed and an actual input revolution speed, and determines whether y_c is located toward y_0 side with respect to y_{min}, the drive torque T_{*0} and a post-correction input revolution acceleration command value (u_i).

27. A shift control apparatus for the hybrid transmission as claimed in claim 26, wherein, when determining that y_c is not located toward y_0 side with respect to y_{min}, the target value correcting section sets a point of intersection between one of the two boundary lines prescribing the realizable region (A) which is nearer to the target operating point (x0, y0) and a line expressing the input revolution acceleration $(d/dt)\omega i = y_{min}$ to be a command operating point, the drive torque T*o and the input revolution acceleration (u_i) to be a post-

correction drive torque command value (T^*o) and a post-correction input revolution acceleration command value (u_i).

28. A shift control apparatus for the hybrid transmission as claimed in claim 24, wherein the target value correcting section determines whether a target driving torque (T^*_{oo}) and a target input revolution acceleration (u_{io}) are feasible depending upon whether a plurality of predetermined conditions are satisfied and wherein, when the target value correcting section determines that the target driving torque (T_{*oo}) and the target input revolution acceleration (u_{io}) are feasible when the predetermined conditions are satisfied, a target operating point which is the combination of the target driving torque x_0 (= T^*_{oo}) and target input revolution acceleration y_0 (= u_{io}) is directly set to be a post-correction drive torque command value (T^*o) and a post-correction target input revolution acceleration (u_i) and, when the target value correcting section determines that the target driving torque (T^*_{oo}) and the target input revolution acceleration (u_{io}) is not feasible, a line segment connecting an origin of the two-dimensional coordinates and target operating point (x_0, y_0) is intersected with one of boundary lines of region A, a region B, and a region C which is within the realizable region (D) and is a nearest point to the target operating point is set to be the command operating point.

29. A shift control apparatus for the hybrid transmission as claimed in claim 24, wherein the target value correcting section determines whether a target driving torque ($T*_{oo}$) and a target input revolution acceleration (u_{io}) are feasible depending upon whether a plurality of predetermined conditions are satisfied and wherein, when the target value correcting section determines that the target driving torque (T_{*oo}) and the target input revolution acceleration (u_{io}) are feasible when the predetermined conditions are satisfied, a target operating point which is the combination of the target driving torque x_0 (= $T*_{oo}$) and target input revolution acceleration y_0 (= u_{io}) is directly set as a post-correction drive torque command value (T*o) and a post-correction target input revolution acceleration (u_i), and, when the target value correcting section determines that the target driving torque (T_{*oo}) and the target input revolution acceleration (u_{io}) are not feasible when the predetermined conditions are not satisfied, the target value correcting section derives a point of intersection (x_0, y_c) between a boundary line of regions A, B, and C and a line expressing To = x_0, the point of intersection (x_0, y_c) being a point of y_c within the realizable region D which is nearest to y_0 to which the target input revolution acceleration (u_{io}) is moved with the target drive torque ($T*_{oo}$) left unchanged, calculates the input revolution acceleration lower limit set value (y_{min}) on the basis of a deviation between the target input revolution speed (ω*i) and an actual input revolution speed (ωi),

and determines whether a value of y_c is located toward a value of y_0 side with respect to y_{min}.

30. A shift control apparatus for the hybrid transmission as claimed in claim 29, wherein, when the value of y_c is located toward the value of y_0 side with respect to y_{min}, the target value correcting section sets the point of intersection (x_0, y_c) to the command operating point, the target drive torque ($T*_0$) and engine revolution acceleration (u_i) at the command operating point being set to be a post-correction drive torque ($T*_0$) and a post-correction engine revolution acceleration (u_i) at the command operating point.

31. A shift control apparatus for the hybrid transmission as claimed in claim 30, wherein, when the value of y_c is not located toward the value of y_0 side with respect to y_{min}, the target value correcting section sets one of points of intersections of boundary lines of regions A, B, and C and a line expressing the input revolution acceleration $(d/dt)\omega i = y_{min}$ which is nearest to the target operating point (x_0, y_0) within the realizable region (D) as a command operating point, the target drive torque ($T*o$) and the target input revolution acceleration (u_i) at the command operating point being set as a post-correction drive torque command value (T_{*o}) and a post-correction input revolution acceleration command value (u_i).

32. A shift control apparatus for the hybrid transmission as claimed in claim 24, wherein the

target value correcting section determines whether a target driving torque ($T*_{oo}$) and a target input revolution acceleration (u_{io}) are feasible depending upon whether a plurality of predetermined conditions are satisfied and wherein, when the target value correcting section determines that the target driving torque (T_{*oo}) and the target input revolution acceleration (u_{io}) are feasible when the predetermined conditions are satisfied, a target operating point which is the combination of the target driving torque x_0 (= $T*_{oo}$) and target input revolution acceleration y_0 (= u_{io}) is directly set as a post-correction drive torque command value ($T*_o$) and a post-correction target input revolution acceleration (u_i), and, when the target value correcting section determines that the target driving torque (T_{*oo}) and the target input revolution acceleration (u_{io}) are not feasible when the predetermined conditions are not satisfied, the target value correcting section derives a point of intersection (x_c, y_0) between each boundary line of regions A, B, and C and a line expressing $(d/dt)\omega i = y_0$, the point of intersection (x_c, y_0) being a point of x_c within the realizable region D which is nearest to x_0 to which the target drive torque ($T*_{oo}$) is moved with the target input revolution acceleration (i_{oo}) left unchanged, calculates the drive torque predetermined lower limit set value (x_{min}) on the basis of a deviation between the target input revolution speed and an actual input revolution speed, and determines whether a value of x_c is located toward a value of x_0 side with respect to x_{min}.

33. A shift control apparatus for the hybrid transmission as claimed in claim 32, wherein, when x_c is located toward the value of x_0 side with respect to x_{min}, the target value correcting section sets the point of intersection (x_c, y_0) to be a command operating point, the drive torque (T*o) and the input revolution acceleration at the command operating point being set as a post-correction drive torque command value (T*o) and a post-correction input acceleration command value (u_i) and, when x_c is not located toward the value of x_0 side with respect to x_{min}, the target value correcting section sets one of the points of intersections between the boundary lines of regions A, B, and C and a line expressing drive torque To = x_{min} which is nearest to the target operating point (x_0, y_0) within the realizable region (D) as the command operating point, the drive torque (T*o) and the input revolution acceleration (u_i) at the command operating point being set to be a post-correction drive torque command value (T*o) and to be a post-correction input revolution acceleration (u_i).

34. A shift control method for a hybrid transmission, the hybrid transmission comprising: a plurality of revolutional members which are enabled to be arranged on a predetermined lever diagram; and

a differential unit having two degrees of freedom such that if revolution states of two revolutional members thereof are determined, the revolutional states of the other revolutional members are determined, an input of a main power source, an

output to a drive system, and a plurality of motor/generators (MG1, MG2) are coupled to the respective revolutional members of the differential unit to adjust a power from the motor/generators in such a manner that a shift ratio between the main power source and the drive system is varied continuously, and the shift control method comprising:

calculating a target drive torque (T*o) to the drive system in accordance with a driving condition;

calculating a target input revolution speed ($\omega*_E$) of one of the revolutional members which is coupled to the main power source (ENG);

calculating a target input revolution acceleration (u_{io}) to converge an actual input revolution (ωi) into the target input revolution speed ($\omega*i$); and

correcting at least one of the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}) to be a value within a realizable region to be set as a drive torque command value (T*o) or an input revolution acceleration command value (u_{io}) in such a manner that polarities of the target drive torque (T*o) and the target input revolution acceleration (u_{io}) are left unchanged, in a case where a combination of the target drive torque (T*o) with the target input revolution acceleration (u_{io}) falls out of a realizable region on two-dimensional coordinates of the drive torque (To) and the input revolution acceleration $\{(d/dt)\omega i\}$ related to a combination of the drive torque and the input revolution acceleration which is feasible in a state

of the present motor/generators, a battery (P_B) for the motor/generators (MG1, MG2), and the main power source, the drive torque command value (T*o) and the input revolution acceleration command value (u_i) contributing to controls of the main power source (ENG) and the motor/generators (MG1, MG2) in place of the target drive torque ($T*_{oo}$) and the target input revolution acceleration (u_{io}).